

Amendments to the Claims:

Please replace all prior versions, and listings of claims in the application with the following listing of claims.

Listing of claims

Claim 1 (currently amended): In an ad-hoc network wherein data packets are sent from a source node to a destination node via an established route, a source node comprising:

- means for requesting route discovery between the source node and a destination node;
- means for determining whether said request for route discovery between the source node and the destination node over existing network connections fails; and
- means for determining a route between the source node and the destination node by forming one or more new connections associated with one or more newly formed subnetworks if it is determined that said request for route discovery between the source node and the destination node over existing network connections fails.

Claim 2 (previously presented): The source node of claim 1, wherein said means for requesting route discovery comprises:

- means for broadcasting a route discovery request message, for a route between the source node and the destination node over one or more connections associated with one or more existing subnetworks, if the source node is a member of one or more of the existing subnetworks.

Claim 3 (previously presented): The source node of claim 2, wherein said means for determining whether said request for route discovery over existing network connections fails comprises:

- means for determining if a timely reply message is received by the source node in response to the broadcast route discovery request message.

Claim 4 (currently amended): The source node of claim 3, wherein said means for ~~establishing~~ determining a route comprises:

means for establishing a route between the source node and the destination node over one or more new connections associated with one or more newly formed subnetworks, if it is determined that a timely reply was not received.

Claims 5-8 (canceled)

Claim 9 (currently amended): In an ad-hoc network, an arrangement for establishing a route over which data packets are to be sent from a source node to a destination node, the arrangement comprising:

a source node; and

at least one destination node,

wherein the source node comprises:

means for requesting route discovery between the source node and the destination node over existing network connections;

means for determining whether said request for route discovery between the source node and the destination node over existing network connections fails; and

means for establishing a route between the source node and the destination node by forming one or more new network connections associated with one or more newly formed subnetworks if it is determined that said request for route discovery between the source node and the destination node over existing network connections failed.

Claim 10 (previously presented): The arrangement of claim 9, wherein the means for determining whether said request for route discovery between the source node and the destination node over existing network connections fails comprises:

means for determining whether the source node received a timely reply in response to the request for route discovery.

Claim 11 (previously presented): The arrangement of claim 9, wherein the network is a Bluetooth technology based network.

Claim 12 (previously presented): In an ad-hoc network, an arrangement for establishing a route between a source node and a destination node over which data packets are to be sent, the arrangement comprising:

a plurality of nodes that communicate with each other over one or more subnetworks;
a source node; and
a destination node,

wherein the source node comprises:

means for broadcasting a route discovery request message for a route between the source node and the destination node over one or more connections associated with the one or more existing subnetworks if the source node is a member of one or more of the existing subnetworks;

means for determining if a timely reply message is received by the source node in response to the broadcast route discovery request message; and

means for establishing a route between the source node and the destination node over one or more new connections associated with one or more newly formed subnetworks if it is determined that a timely reply message was not received.

Claim 13 (previously presented): The arrangement of claim 12, wherein the source node further comprises:

means for establishing a route between the source node and the destination node over one or more new connections associated with one or more newly formed subnetworks if the source node is not a member of one or more of the existing subnetworks.

Claim 14 (previously presented): The arrangement of claim 12, wherein the source node further comprises:

means for establishing a route between the source node and the destination node over one or more new connections associated with one or more newly formed subnetworks if the destination node is not a member of one or more of the existing subnetworks.

Claim 15 (previously presented): The arrangement of claim 12, wherein the source node further comprises:

means for determining whether a route over one or more new connections associated with one or more newly formed subnetworks is desirable, if it is determined that a timely reply in response to the route discovery request message is received by the source node.

Claim 16 (previously presented): The arrangement of claim 15, wherein the source node further comprises:

means for establishing a route between the source node and the destination node over one or more connections associated with the one or more existing subnetworks, if it is determined that a timely reply in response to the route discovery request message is received and it is determined that a route over one or more new connections associated with one or more newly formed subnetworks is not desirable.

Claim 17 (previously presented): The arrangement of claim 15, wherein the source node further comprises:

means for establishing a route between the source node and the destination node over one or more connections associated with the one or more existing subnetworks if it is determined that a timely reply in response to the route discovery request message is received and it is determined that a route over one or more new connections associated with one or more newly formed subnetworks is desirable, and for simultaneously initiating route discovery for a route between the source node and the destination node over one or more connections associated with one or more newly formed subnetworks.

Claim 18 (previously presented): The arrangement of claim 12, wherein the ad-hoc network is a Bluetooth technology based network.

Claim 19 (previously presented): The arrangement of claim 18, wherein the existing and newly formed subnetworks are piconets.